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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/755,039	01/09/2004	John E. Jones	47171-354USD1	8706
41230	7590	12/13/2005	EXAMINER	
CUMMINS-ALLISON CORP. C/O JENKENS & GILCHRIST 225 WEST WASHINGTON STREET, SUITE 2600 CHICAGO, IL 60606			JOHNS, ANDREW W	
			ART UNIT	PAPER NUMBER
			2621	

DATE MAILED: 12/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/755,039

Applicant(s)

JONES ET AL.

Examiner

Andrew W. Johns

Art Unit

2621

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 November 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-71 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-52 is/are allowed.
- 6) ☒ Claim(s) 53-63, 65-69 and 71 is/are rejected.
- 7) ☒ Claim(s) 64 and 70 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. Applicant's arguments, see pages 17-21 of the response, filed 18 November 2005, with respect to the various rejections of claims 1-52 under 35 U.S.C. § 103 have been fully considered and are persuasive. The rejections of these claims have been withdrawn. In addition, the amendments to claim 62 and 71 resolve the issue in these claims under 35 U.S.C. § 112, second paragraph, and the Terminal Disclaimer filed 18 November 2005 resolves the obviousness-type double patenting rejections.
2. Applicant's arguments with respect to claims 53-71 have been considered but are moot in view of the new ground(s) of rejection.

Drawings

3. New corrected drawings in compliance with 37 C.F.R. § 1.121(d) are required in this application because the proposed correction filed 27 September 2004 is approved by the examiner. Applicant is advised to employ the services of a competent patent draftsman outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

Claim Rejections - 35 U.S.C. § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. § 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 53-62 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The recitation, in lines 9-10 of claim 53, as amended, of “captures full image of at least one side an image of each passing currency bill” is confusing. It isn’t clear if the bill imager is capturing a full image of one side of an image of the bill, or of the bill itself.

Claims 54-62 are variously dependent from this indefinite claim.

Claim Rejections - 35 U.S.C. § 103

6. The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 53, 55-56, 59-60, 62-63, 65, 68-69 and 71 rejected under 35 U.S.C. § 103(a) as being unpatentable over Conant (US 5,680,472 A), in view of Echapare Ibarrola et al. (EP 0 718 809 A2).

Conant teaches a document processing system and method that includes an input receptacle for receiving currency bills (14 in Figure 1; column 3, lines 42-43), each currency bill having a wide and narrow dimension (as shown in Figure 1, bills 12 are generally rectangular in shape, having both a width and a length); at least one output receptacle (40, 42 in Figure 1; column 4, lines 9-10); a bill imager (30 in Figure 1; column 3, line 52 through column 4, line 4); and a transport mechanism coupled to the input receptacle for receiving the currency bills from the input receptacle and transporting the currency bills past the bill imager to the at least one

output receptacle (column 3, lines 43-52), with their narrow dimension parallel to a direction of transport (see Figure 1, the direction of travel is indicated by arrow 66 and is parallel to the narrow dimension (i.e., width) of the bills 12); wherein the bill imager captures an image of each passing bill (column 4, lines 31-41), as stipulated by claims 53 and 63. In addition, Conant further teaches that each bill includes field data imprinted thereon and the bill imager processes the captured image to recognize the imprinted field data (column 4, lines 55-57), as further required by claim 55; stores the bill images (column 5, lines 3-5), as variously set forth in claims 56 and 65; that the output receptacle can include a plurality or two bins (column 5, lines 51-56), as defined in claims 59-60 and 68-69; and that the bills are transported at a rate of at least 800 bills per minute (column 4, lines 12-13), as set forth in claims 62 and 71.

However, Conant fails to teach capturing a full image of at least one side of the currency bill, as further required by claims 53 and 63.

Echapare Ibarrola et al. teaches a method and system for processing currency bills (see the title, for example), that includes transporting the currency bills past an imager (column 8, lines 25-40), and further teaches that a full image of at least one side of the currency bill is captured (column 8, lines 53-54). Because the imaging system of Echapare Ibarrola et al. allows for the processing of bills of different sizes (column 6, lines 1-5) and provides for more accurate analysis of misaligned bills (column 6, lines 6-26), it would have been obvious to one of ordinary skill in the art to use such full bill imaging in the Conant system to improve the analysis of the bills therein.

8. Claims 57 and 66 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Conant and Echapare Ibarrola et al. as applied to claims 53, 55-56, 59-60, 62-63, 65, 68-69 and 71 above, and further in view of Cahill et al. (US 5,678,046 A).

While Conant and Echapare Ibarrola et al. variously meet a number of the limitations of the claims, as pointed out more fully above, Conant and Echapare Ibarrola et al. each fails to specifically teach outputting the bill images over a communications channel, as further required by claims 57 and 66.

Cahill et al. teaches a financial document processing system and method that transports the documents (column 14, lines 59-67) past an imager (204 in Figure 3) and recognizes data from fields within the documents, and transmits the document images over a communications channel (i.e., to an accounting system 10-11 in Figure 2). Because both Conant and Cahill et al. each teach systems for automated scanning and processing of financial document images, and further because Cahill et al. teaches a robust technique for archiving and processing these documents, it would have been obvious to one of ordinary skill in the art to incorporate these features of Cahill et al. into the system and method of Conant so as to improve the robustness and functionality of the bill processing therein.

9. Claims 58 and 67 are rejected under 35 U.S.C. 103(a) as being unpatentable over Conant and Echapare Ibarrola et al. as applied to claims 53, 55-56, 59-60, 62-63, 65, 68-69 and 71 above, and further in view of Raterman et al. '824 (WO 93/23824 A1).

While Conant and Echapare Ibarrola et al. variously meet a number of the limitations of the claims, as pointed out more fully above, Conant and Echapare Ibarrola et al. each fails to specifically teach that the output receptacle can include a single bin, as further required by claims 58 and 67.

Raterman et al. '824 teaches a document evaluation device (shown generally in Figure 11, for example) for receiving a stack of documents (page 8, lines 11-12) and rapidly evaluating all the documents in the stack (page 8, lines 15-19), including a single output receptacle for

receiving the documents after the documents have been evaluated (242 in Figure 11; page 31, lines 9-11). Because Raterman et al. '824 provides for a compact system for processing financial documents, it would have been obvious to use a single bin in the Conant system to improve its portability. Therefore, the claimed invention would have been obvious to one of ordinary skill in the art at the time of the invention.

Allowable Subject Matter

10. Claims 1-52 are allowed.
11. Claims 64 and 70 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
12. Claims 54 and 61 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. § 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Conclusion

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See M.P.E.P. § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 C.F.R. § 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 C.F.R. § 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however,

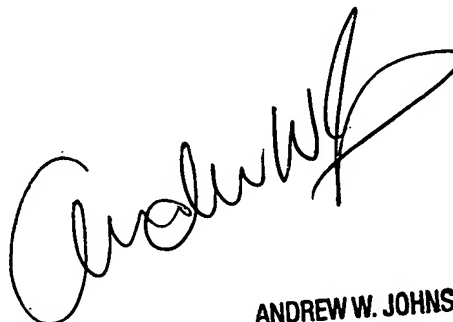
will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew Johns whose telephone number is (571) 272-7391. The examiner is normally available Monday through Friday, at least during the hours of 9:00 am to 3:00 pm Eastern Time. The examiner may also be contacted by e-mail using the address: andrew.johns@uspto.gov. (Applicant is reminded of the Office policy regarding e-mail communications. See M.P.E.P. § 502.03)

If attempts to reach the examiner are unsuccessful, the examiner's supervisor, Joseph Mancuso, can be reached at (571) 272-7695. The fax phone number for this art unit is (571) 273-8300. In order to ensure prompt delivery to the examiner, all unofficial communications should be clearly labeled as "Draft" or "Unofficial."

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center Receptionist whose telephone number is (571) 272-2600.

A. Johns
9 December 2005

A handwritten signature in black ink, appearing to read 'Andrew W. Johns', with a large, stylized loop at the end.

ANDREW W. JOHNS
PRIMARY EXAMINER